

REMARKS

Claims 25-36 are all the claims pending in the application. The Examiner has rejected claims 25-27, 29-31, and 33-35, and has objected to claims 28, 32, and 36 as depending from rejected claims.

Claim 28 is rewritten in independent form. No new matter has been added.

The Examiner rejects claims 25-27, 29-31, and 33-35 under 35 U.S.C. § 102(e) as being anticipated by US patent No. 5,974,164 to Chee. The Examiner states that Chee teaches all the elements of independent claim 25; which are generally, (1) a first detection means for detecting a first labeling substance, (2) a second detection means for detecting a second labeling substance, and (3) an analyzing means for measuring the quantities of both first and second labeling substances. The Examiner further states that a first detection means, a second detection means, and an analyzing means taught by Chee have the ability to perform the functions of the respective elements of claim 25.

Applicants assert that the apparatus of claim 25 is both structurally and functionally distinct from that taught by Chee.

(1) In Chee, the first and second labeling substances are bound to separate samples that do not hybridize to each other, but hybridize separately to a third, unlabeled member (see Chee column 25, lines 4-6). In the instant application, the first and second labeling substances are bound to separate samples that bind, i.e. hybridize, to each other, and there is no third unlabeled member. Therefore, the instant invention and that taught by Chee are structurally distinct.

(2) In Chee, two separate samples are labeled, combined, and hybridized to a third member or probe. Chee thereby allows the experimenter to reduce variations between two samples since the samples underwent identical processing steps (see Chee column 24, lines 38-41). However, in the present application, the first labeled sample is disposed on a test piece, i.e. chip, and the second labeled sample is bound, i.e. hybridized, to the first labeled sample. The experimenter can therefore correct the signal from the second labeled sample at each position based on the amount of the first labeled sample disposed at that position. Therefore, the detection means of the instant invention do not allow correction between different experimental samples, as in Chee, but allow for correction within a single experimental sample. Therefore, the detection means of the instant application and those taught by Chee are functionally distinct.

(3) In Chee, the analyzing means does not correct the level of the second signal based on the level of the first signal, as in the present invention. The analyzing means in Chee merely plots the level of the two signals on a graph, separately, and for each position on the chip. Where signals are the same, the lines will overlap; where the signals are different, they won't (see Chee, Figure 14A). Since Chee does not teach correcting the level of one signal based on the level of another signal, the analyzing means of the instant invention must be both structurally and functionally distinct from the analyzing means taught by Chee.

Applicants assert that since Chee does not anticipate claim 25, Chee cannot anticipate dependent claims 26-27, 29-31, and 33-35. Therefore, Applicants respectfully request that the section 102(e) rejection be withdrawn. Accordingly, Applicants also request that the Examiner's objection to claims 28, 32, and 36, as depending from rejected claims, also be withdrawn.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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